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NAVAL AIR TEST CENTER

REPORT OF TEST RESULTS

FROM

Commander, Naval Air Test Center, Patuxent River, Maryland 20670

TO

Commander, Naval Air Systems Command, Washington, D. C. 20361

AIRTASK	WORK UNIT	AIRCRAFT BUNO
A510-5103/053-2/ 6244-000-265	A53411-20A	
	REPORT SEQUENCE UNDER WORK UNIT Twelfth Interim Report	EFFORT LEVEL Normal

TITLE

Test and Evaluation of the S-3A Test Fixture (P/N T-13649); First Report (Final)

DATES OF TESTS	LOCATION OF TESTS	COGNIZANT NAVAIRSYSCOM DIVISION
29 January - 3 February 1976	NAVAIRTESTCEN	AIR-534/AIR-510/AIR-417
NATC PROJECT OFFICER/ENGINEER	NATC DIVISION	COGNIZANT NAVAIRSYSCOM ENGINEER
Mr. T. Hickey	Systems Engineering	Mr. Paul/CDR Kraft/LCDR Salo
ENCLOSURES		

Ref: (a) S-3A Approved Support Equipment List (SEL) of 9 May 1975

INTRODUCTION

1. In accordance with the AIRTASK/Work Unit, the Test Fixture (P/N 13649) (reference (a), Item Number 0124) was evaluated to verify its suitability and supportability for use in support of the S-3A aircraft at the Intermediate level of maintenance. As defined in reference (a), the Test Fixture is designed to be used following the repair of the Landing Gear Hydraulic Solenoid Valve (P/N 45770-3) to functionally test the valve to ensure proper operation.

RESULTS/REMARKS

2. The Test Fixture is suitable and supportable; however, tests revealed the following Part II deficiency which should be corrected as soon as practicable. The Test Fixture has four identical servicing ports which are used for connection to the hydraulic test stand. None of these ports are labelled to identify supply and/or return. During functional test, maintenance personnel must continually refer to the technical manual for proper connecting instructions. The lack of identification of the four servicing ports could result in incorrect connection of these ports which would result in incorrect test results utilizing the Test Fixture.

Part I indicates a deficiency, the correction of which is necessary because it adversely affects:

- a. Airworthiness of the aircraft.
- b. The ability of the aircraft (or piece of equipment) to accomplish its primary or secondary mission (or intended use).
- c. The effectiveness of the crew as an essential subsystem.
- d. The safety of the crew or the integrity of an essential subsystem. In this regard, a real likelihood of injury or damage must exist. Remote possibilities or unlikely sequences of events shall not be used as a basis for safety items.

Part II indicates a deficiency of lesser severity than a Part I which does not substantially reduce the ability of the aircraft or piece of equipment to accomplish its primary or secondary mission, but the correction of which will result in significant improvement in the effectiveness, reliability, maintainability, or safety of the aircraft or equipment. A Part II deficiency is a deficiency which either degrades the capabilities of the aircraft or equipment or requires significant operator compensation to achieve the desired level of performance; however, the aircraft or equipment being tested is still capable of accomplishing its mission with a satisfactory degree of safety and effectiveness.

Part III indicates a deficiency which is minor or slightly unpleasant or appears too impractical or uneconomical to correct in this model, but should be avoided in future designs.

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CONCLUSIONS

3. The Test Fixture (P/N 13649) is suitable and supportable.
4. Failure to label the four servicing ports on the Test Fixture is a Part II deficiency.

RECOMMENDATIONS

5. Correct the Part II deficiency in paragraph 2 as soon as practicable.



C. J. BERTHE, JR.
By direction

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